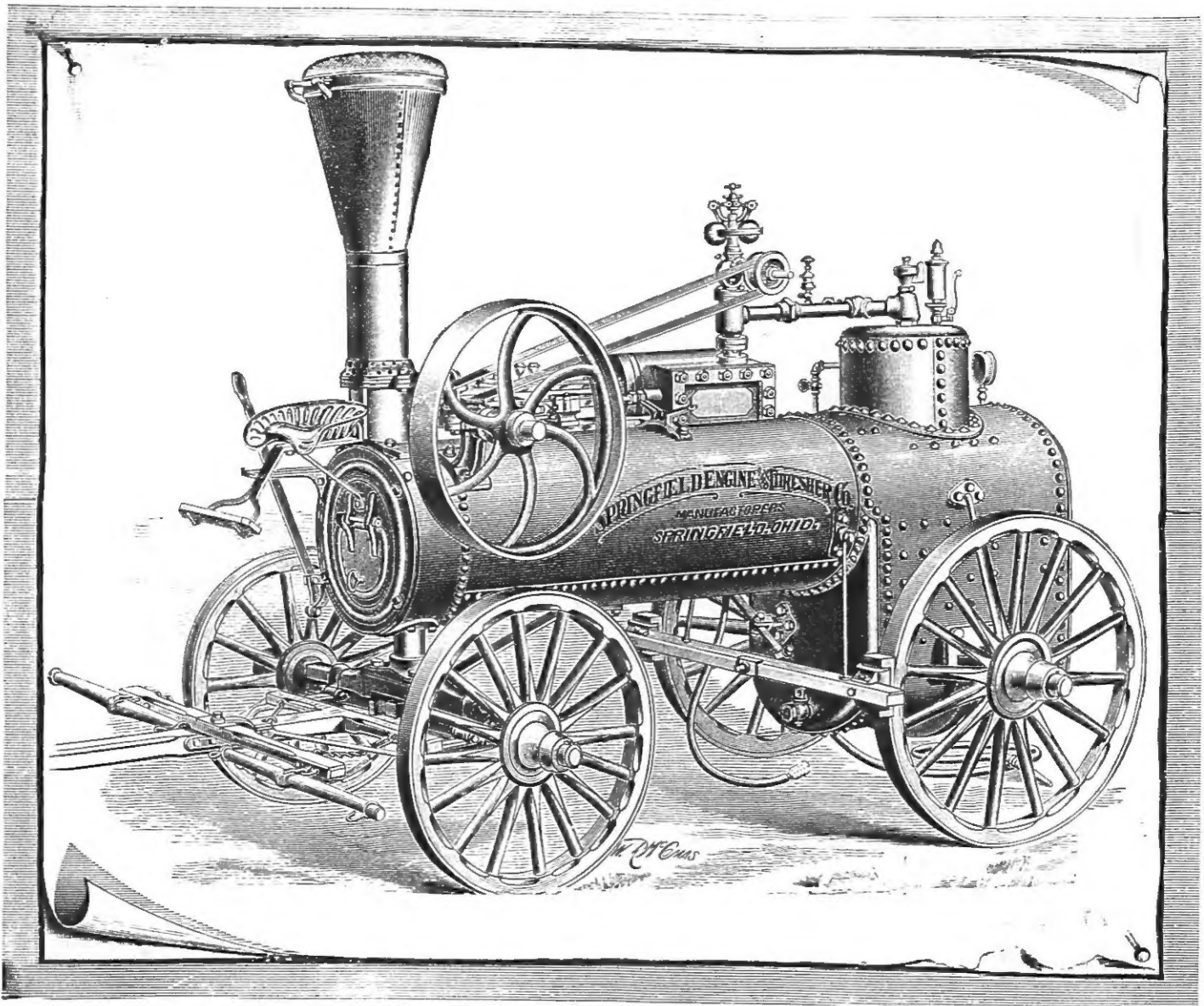


Springfield Engine & Thresher Co., Springfield, Ohio.



*The Springfield Portable Engine.*—(Right hand view looking from the front.)

Our independent pump takes steam direct from the dome, and the boiler can be filled without running the engine. It has a regular slide valve. There is a cross-head in the middle of the brass plunger, connected with a rod to a crank at the top of the pump, which makes a positive movement of the slide valve for the induction and exhaust of the steam. In every other respect the pump is on the same principle as our cross-head pump and there is nothing to get out of fix.

The objection to most steam pumps is, that they take almost as much repairing as an engine, and are always getting out of order. In our pump there is nothing to get out of order, and we claim it is the simplest and most perfect steam pump now in use. The plunger or valve can not be cut out by muddy or gritty water. The pump can not be choked up by dirt or sediment. The steam

exhaust from the independent pump passes into the heater and the water from the pump goes into the heater. Attached to the pump, we have a hose for throwing water.

We use the greatest care in fitting our pipes. The heater pipe is put under six hundred pounds hydraulic pressure, and after the pipes are attached to the pump they are all tested under 215 pounds cold water pressure.

The pipes in the heater are heated with the exhaust steam and so effectually that cold water being pumped in is heated to 190 or 200 degrees before it reaches the boiler. This is all done by using the exhaust steam.

Our brass fittings, oil cups, check valves, cylinder cocks, etc., are of the very best material. We use pet cocks on all pipes and connections, so that steam and water can be let out and prevent freezing.